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Corporate Environmental Programs General Electric Company 100 Woodlawn Avenue, Pittsfield, MA 01201

June 19, 2001

Bryan Olson EPA Project Coordinator U.S. Environmental Protection Agency EPA New England One Congress Street, Suite 1100 Boston, Massachusetts 02114-2023

Re: GE-Pittsfield/Housatonic River Site

Newell Street Area I (GECD440)

Supplemental Pre-Design Investigation Results and Proposal for Additional

Soil Sampling at Parcel J9-23-26 (Lakewood Playground)

Dear Mr. Olson:

This letter provides the results of additional soil investigations recently performed by the General Electric Company (GE) at and adjacent to a portion of Newell Street Area I within the GE-Pittsfield/Housatonic River Site. The soil investigations were conducted in response to the detection of arsenic in certain soil samples collected during recent pre-design soil investigations that were performed by GE at Lakewood Playground (Parcel J9-23-26) in Pittsfield in accordance with GE's Addendum to Pre-Design Investigation Work Plan for the Newell Street Area I Removal Action (December 2000), which was conditionally approved by the U.S. Environmental Protection Agency (EPA) on January 11, 2001.

The preliminary results from the pre-design investigation indicated the detection of arsenic in two surface soil samples at concentrations that exceed the threshold set forth in the Massachusetts Contingency Plan (MCP) for reporting a potential Imminent Hazard for arsenic (40 ppm) (310 CMR 40.0321(2)(b)). Those samples consisted of surface soil samples from locations J9-23-26-C-24 (41.8 ppm) and J9-23-26-E-23 (85.6 ppm). Upon learning of these results, GE notified the Massachusetts Department of Environmental Protection (MDEP) on March 13, 2001, of a potential Imminent Hazard (as defined in the MCP) and prepared a proposal to further assess the presence of arsenic in this area. These investigations were proposed to EPA in a letter dated April 9, 2001 and were approved by EPA on April 12, 2001.

### **Recent Soil Investigations**

GE collected the additional surface and subsurface soil samples as proposed for the supplemental predesign investigation on May 7, 2001. The supplemental pre-design investigation consisted of the collection of 10 surface soil samples (0- to 1-foot depth interval) and four subsurface soil samples (1- to 3-foot depth interval) for arsenic analysis. The overall arsenic data set for Parcel J9-23-26, including the recently collected sample results, are summarized in Table 1 on attached Figure 1.

The analysis of the sample collected from location D-24 at the 0- to 1-foot depth interval revealed an arsenic concentration of 39.2 ppm. Although this concentration is below the Imminent Hazard threshold, as defined by the MCP, this concentration is in excess of the MCP Method 1 S-1 soil standard for arsenic (30 ppm). In addition, analysis of the sample from location E-23 at the 1- to 3-foot

depth interval also revealed an arsenic concentration (60.1 ppm) which is greater than the MCP Method 1 S-1 soil standard. Analytical results from the remaining soil samples collected as part of this supplemental pre-design investigation were less than the MCP Method 1 S-1 soil standard for arsenic, as shown in Table 1.

## **Proposed Soil Sampling**

Given the arsenic concentrations detected above the MCP Method 1 S-1 soil standard in samples collected from locations D-24 and E-23 at Parcel J9-23-26, GE proposes to collect additional soil samples to further delineate the extent of arsenic in the area of those samples. The proposed additional sampling and analytical activities are described below. They are also summarized in Table 2 on Figure 1 and on Figure 1 itself. Figures 2 through 4 show more specifically the existing arsenic data and proposed additional sampling and analyses for the 0- to 1-foot, 1- to 3-foot, and 3- to 6-foot depth intervals, respectively, at Parcel J9-23-26.

Based on the detection of arsenic in the soil sample analyzed from the 0- to 1-foot depth interval at location D-24, GE proposes to collect samples at proposed locations D-25, D-26, E-25, and E-26 from the uppermost one foot, as shown on Figures 1 and 2. The samples from D-25 and E-25 will be analyzed for arsenic, and the samples from D-26 and E-26 will be held at the laboratory for future arsenic analysis in the event that the samples from locations D-25 and/or E-25 show arsenic concentrations in excess of the Method 1 S-1 soil standard. Data from these locations will further define the presence of arsenic to the east and southeast of D-24, while prior analytical results are sufficient to delineate the presence of arsenic at other areas around D-24. The existing arsenic data and proposed soil sample locations for the 0- to 1-foot depth interval are shown on Figure 2.

GE also proposes to continue arsenic delineation efforts in the proximity of sample E-23, where arsenic concentrations in excess of the Method 1 S-1 soil standard were observed at the 1- to 3-foot depth interval. The proposed additional soil sampling will include the collection of additional samples from location E-23 itself and from nearby locations D-23, E-22, E-24, and F-23, as illustrated on Figures 1, 3, and 4. At each of these sample locations, arsenic data already exist for the 0- to 1-foot depth interval and location E-23 has already been sampled at the 1- to 3-foot depth. Accordingly, GE will collect samples from the 3- to 6-foot depth interval at location E-23 and from both the 1- to 3-foot and 3- to 6-foot depth intervals at locations D-23, E-22, E-24, and F-23. The 3- to 6-foot depth sample from location E-23 and the 1- to 3-foot depth samples from the other four locations will be analyzed for arsenic, and the 3- to 6foot depth samples from the latter four locations will be held for possible future arsenic analysis. Specifically, if an arsenic concentration above 30 ppm is detected in the 3- to 6-foot depth sample from location E-23, the remaining 3- to 6-foot samples will be analyzed for arsenic; in addition, if arsenic concentrations above 30 ppm are detected in any of the 1- to 3-foot depth samples, the corresponding 3to 6-foot depth sample(s) from such location(s) will be analyzed for arsenic. The existing arsenic data and the proposed sample locations for the 1- to 3-foot and 3- to 6-foot depth intervals are shown on Figures 3 and 4, respectively.

It should also be noted that, based on current information, there is no evidence to tie the presence of arsenic in soil at Parcel J9-23-26 to releases or fill material from the GE facility. Accordingly, while GE has conducted and is proposing to conduct additional sampling for arsenic to delineate the extent of arsenic in the portion of this property adjacent to the former oxbow area within Newell Street Area I as part of its investigation of Newell Street Area I pursuant to the Consent Decree, GE reserves the right to contest liability for the presence of arsenic at Parcel J9-23-26.

## **Proposed Schedule**

GE will initiate this supplemental sampling at Parcel J9-23-26 upon EPA approval of this proposal. GE will notify EPA of its timetable for this sampling at least seven days in advance of the initiation of the sampling. GE proposes to complete the sampling and analytical activities proposed herein, including any arsenic analyses of the soil samples that are held for possible future analyses depending on the initial analytical results, and to submit a report thereon within 30 days from EPA approval of this proposal. That report will present all available arsenic data from Parcel J9-23-26 (including the results of this supplemental investigation), will provide an evaluation of the need for further arsenic sampling at or adjacent to the sampled area, and, if warranted, will include a proposal for such additional sampling. In addition, GE will incorporate these results into its evaluations to be presented in the Conceptual Removal Design/Removal Action Work Plan for Newell Street Area I.

Please call Richard Gates or me if you have any questions regarding this proposal.

Sincerely.

Andrew T. Silfer, P.E. GE Project Coordinator

Enclosures
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cc:

M. Nalipinski, EPA

T. Conway, EPA

H. Inglis, EPA

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J.L. Cutler, MDEP (2 copies)

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T. Angus, MDEP

Mayor G. Doyle, City of Pittsfield

Pittsfield Commissioner of Public Health

Director, PEDA

Robert Mellace, Parks & Recreation Department

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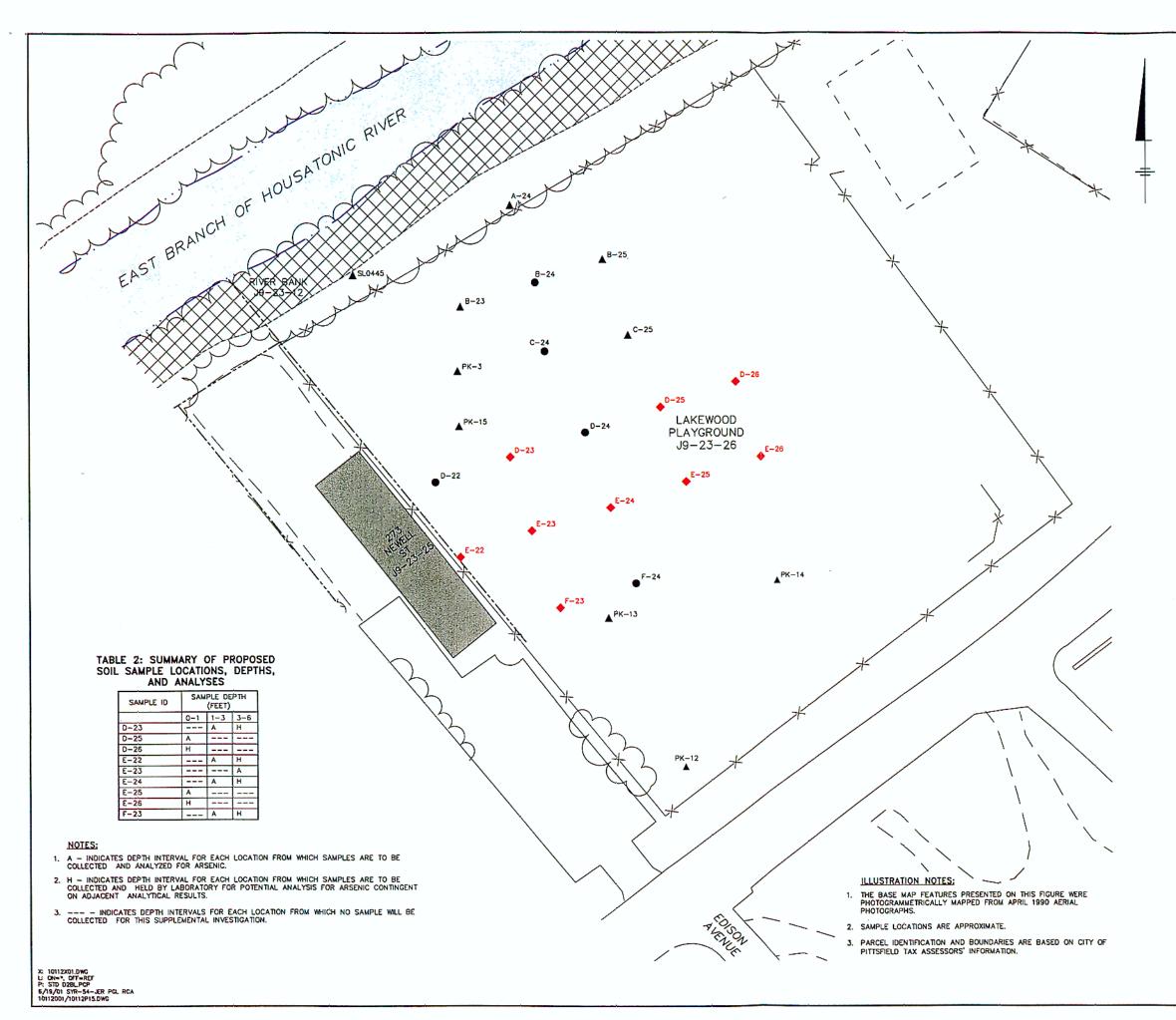
J. Nuss, BBL

J. Bieke, Shea & Gardner

S. Gutter, Sidley & Austin

**Public Information Repositories** 

GE Internal Repositories



--- APPROXIMATE PARCEL BOUNDARY

J9-23-23 PARCEL ID

— FENCE LINE

EXISTING SURFACE SOIL SAMPLE LOCATION

BUILDINGS

PAVED AREAS

AREA TO BE ADDRESSED AS PART OF 1/2-MILE REACH

EXISTING SURFACE/SUBSURFACE SOIL SAMPLE LOCATION

PROPOSED SOIL SAMPLE LOCATION (SEE TABLE 2 FOR SAMPLING/ANALYSIS SCHEDULE)

TABLE 1: SUMMARY OF EXISTING ARSENIC DATA FOR THE 0-1 FT., 1-3 FT. AND 3-6 FT. DEPTH INTERVALS

SAMPLE ID	SAMPLE DEPTH (FEET)	DATE COLLECTED	ARSENIC CONCENTRATION (ppm)
PK-3	0-1	05/07/01	8,5
PK-12	0-0.5	05/09/91	6.30 AN**
PK-13	0-0.5	05/09/91	5.00
PK-14	0-0.5	05/09/91	9.10 N
PK-15	0-0.5	05/09/91	7.00
J9-23-26-A-24	0-1	02/09/01	6.30
J9-23-26-B-24	0-1	05/07/01	13.5
J9-23-26-B-24	1-3	02/08/01	10.1
J9-23-26-B-24	3-6	02/08/01	11.0
J9-23-26-B-25	0-1	05/07/01	7.80 [17.1]
J9-23-26-C-24	0-1	02/08/01	41.8
J9-23-26-C-24	1-3	05/07/01	7.40
J9-23-26-C-25	0-1	05/07/01	8.00
J9-23-26-D-22	3-6	02/08/01	7.40
J9-23-26-D-23	0-1	05/07/01	5.40
J9-23-26-D-24	0-1	05/07/01	39.2
J9-23-26-D-24	1-3	05/07/01	9,90
J9-23-26-E-22	0-1	05/07/01	4.90
J9-23-26-E-23	0-1	02/09/01	85.6
J9-23-26-E-23	1-3	05/07/01	60.1
J9-23-26-E-24	0-1	05/07/01	10.0
J9-23-26-F-23	0-1	05/07/01	6.40
J9-23-26-F-24	0-1	05/07/01	7.20
J9-23-26-F-24	1-3	05/07/01	4.80
J9-23-26-SL0445	0-1	02/09/01	8.50

#### NOTES:

- 1. DUPLICATE SAMPLE RESULTS ARE PRESENTED IN BRACKETS.
- A RESULTS REPORTED FROM SINGLE-POINT METHOD-OF-STANDARD ADDITION CALCULATION.
- N INDICATES SAMPLE MATRIX SPIKE ANALYSIS WAS OUTSIDE CONTROL LIMITS.
- \*\* 

  INDICATES SAMPLE MATRIX DUPLICATE WAS OUTSIDE CONTROL LIMITS.

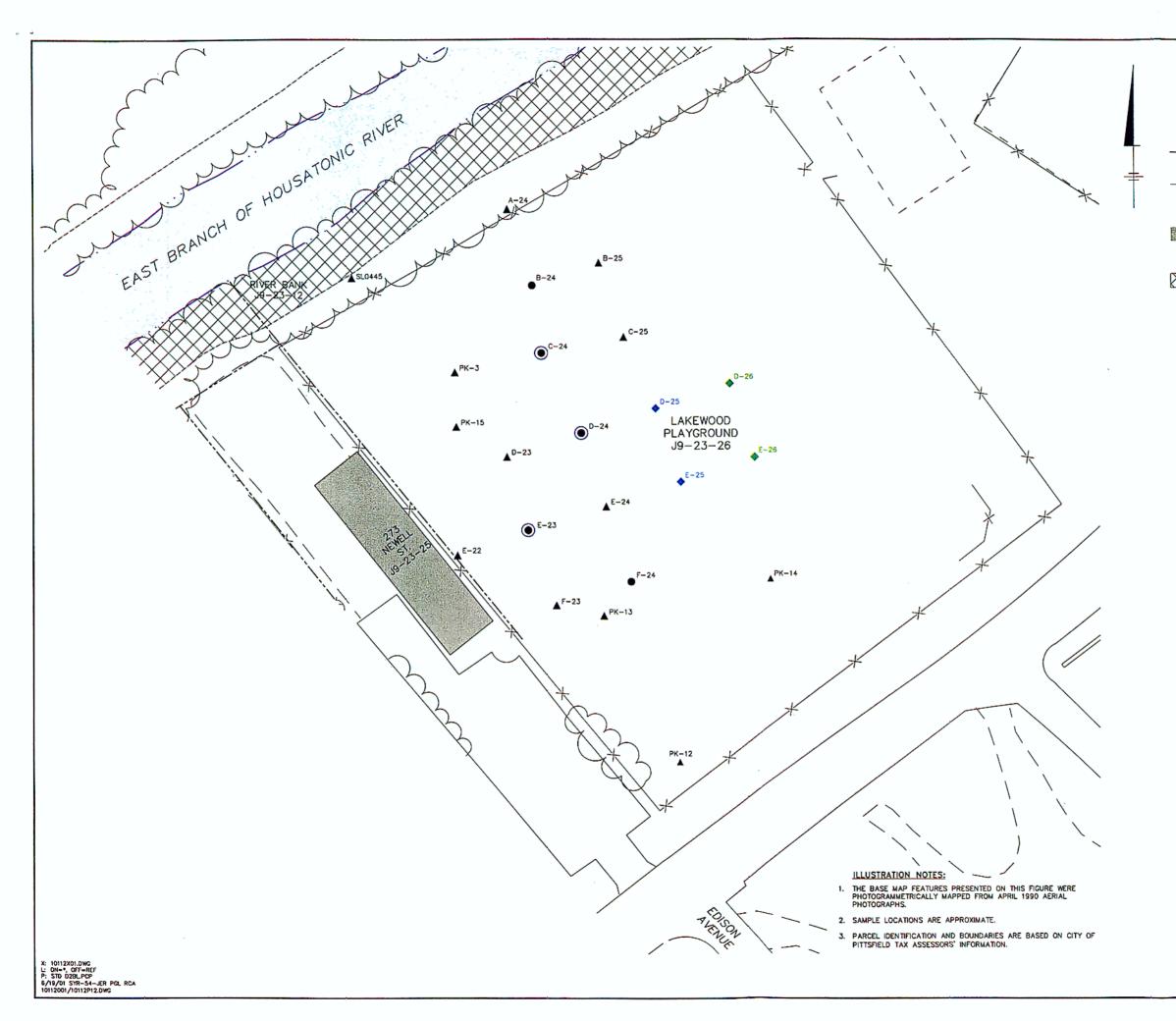


GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS PARCEL J9-23-26

SUMMARY OF ARSENIC SOIL SAMPLE RESULTS AND PROPOSED SUPPLEMENTAL INVESTIGATIONS



BLASLAND, BOUCK & LEE, INC. engineers & scientists



- APPROXIMATE PARCEL BOUNDARY

J9-23-23 PARCEL ID

--- ×---- FENCE LINE

▲ C-25 EXISTING SURFACE SOIL SAMPLE LOCATION

1-24 EXISTING SURFACE/SUBSURFACE SOIL SAMPLE LOCATION

BUILDINGS

PAVED AREAS

××××

AREA TO BE ADDRESSED AS PART OF 1/2-MILE REACH

SAMPLE LOCATION WITH ARSENIC LEVELS ABOVE MCP METHOD 1 S-1 SOIL STANDARD (30 ppm) (0-1 FT.)

**♦**D-25

SOIL SAMPLE LOCATION PROPOSED FOR ARSENIC SAMPLING AND ANALYSIS (0-1 FT.)

D-26 SC

SOIL SAMPLE TO BE COLLECTED AND HELD FOR POSSIBLE ARSENIC ANALYSIS (0-1 FT.)

## SUMMARY OF EXISTING ARSENIC DATA FOR THE 0-1 FT. DEPTH INTERVAL

SAMPLE ID	SAMPLE DEPTH (FEET)	DATE COLLECTED	ARSENIC CONCENTRATION (ppm)
PK-3	0-1	05/07/01	8.5
PK-12	0-0.5	05/09/91	6.30 AN**
PK-13	0-0.5	05/09/91	5.00
PK-14	0-0.5	05/09/91	9.10 N
PK-15	0-0.5	05/09/91	7.00
J9-23-26-A-24	0-1	02/09/01	6.30
J9-23-26-B-24	0-1	05/07/01	13.5
J9-23-26-B-25	0-1	05/07/01	7.80 [17.1]
J9-23-26-C-24	0-1	02/08/01	41.8
J9-23-26-C-25	0-1	05/07/01	8.00
J9-23-26-D-23	0-1	05/07/01	5.40
J9-23-26-D-24	0-1	05/07/01	39.2
J9-23-26-E-22	0-1	05/07/01	4.90
J9-23-26-E-23	0-1	02/09/01	85.6
J9-23-26-E-24	0-1	05/07/01	10.0
J9-23-26-F-23	0-1	05/07/01	6.40
J9-23-26-F-24	0-1	05/07/01	7.20
J9-23-26-SL0445	0-1	02/09/01	8.50

#### NOTES:

- 1. DUPLICATE SAMPLE RESULTS ARE PRESENTED IN BRACKETS.
- A RESULTS REPORTED FROM SINGLE-POINT METHOD-OF-STANDARD ADDITION CALCULATION.
- N INDICATES SAMPLE MATRIX SPIKE ANALYSIS WAS OUTSIDE CONTROL LIMITS.
- 4. \*\* INDICATES SAMPLE MATRIX DUPLICATE WAS OUTSIDE CONTROL LIMITS.

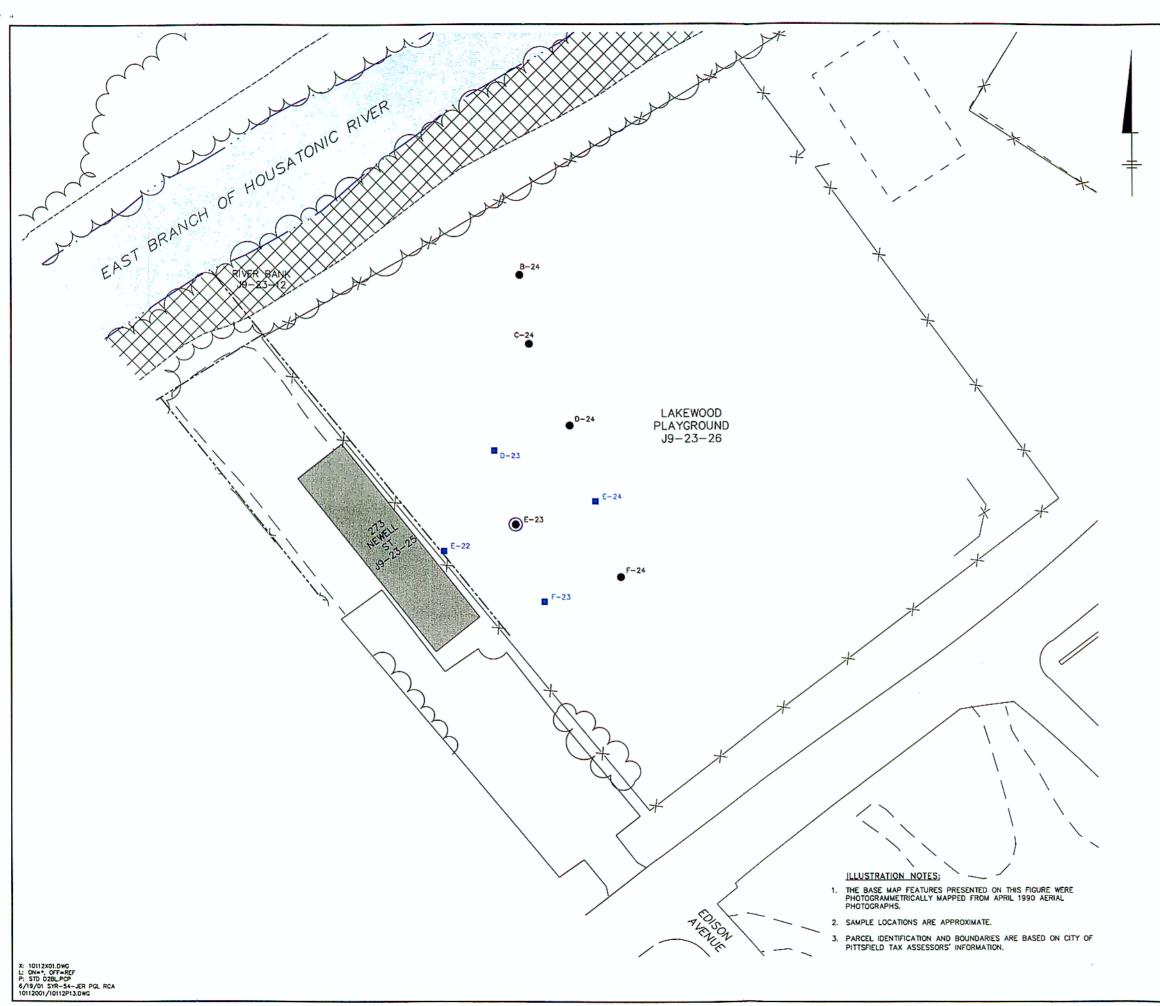


GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS PARCEL J9-23-26

ARSENIC SOIL SAMPLE RESULTS
AND PROPOSED SUPPLEMENTAL
INVESTIGATIONS:
UPPERMOST ONE FOOT



BLASLAND, BOUCK & LEE, INC. engineers & scientists



--- APPROXIMATE PARCEL BOUNDARY

J9-23-23 PARCEL ID

EXISTING SURFACE SOIL SAMPLE LOCATION

EXISTING SURFACE/SUBSURFACE SOIL SAMPLE LOCATION

BUILDINGS

PAVED AREAS

AREA TO BE ADDRESSED AS PART OF 1/2-MILE REACH

EXISTING SOIL SAMPLE LOCATION PROPOSED FOR ARSENIC SAMPLING AND ANALYSIS (1-3 FT.)

SAMPLE LOCATION WITH ARSENIC LEVELS ABOVE MCP METHOD 1 S-1 SOIL STANDARD (30 ppm) (1-3 FT.)

# SUMMARY OF EXISTING ARSENIC DATA FOR THE 1-3 FT. DEPTH INTERVAL

J9-23-26-8-24 1-3 02/08/01 10.1 J9-23-26-C-24 1-3 05/07/01 7.40	C NTON
J9-23-26-C-24 1-3 05/07/01 7.40	
71.0	
J9-23-26-D-24 1-3 05/07/01 9.90	
J9-23-26-E-23 1-3 05/07/01 60.1	
J9-23-26-F-24 1-3 05/07/01 4.80	



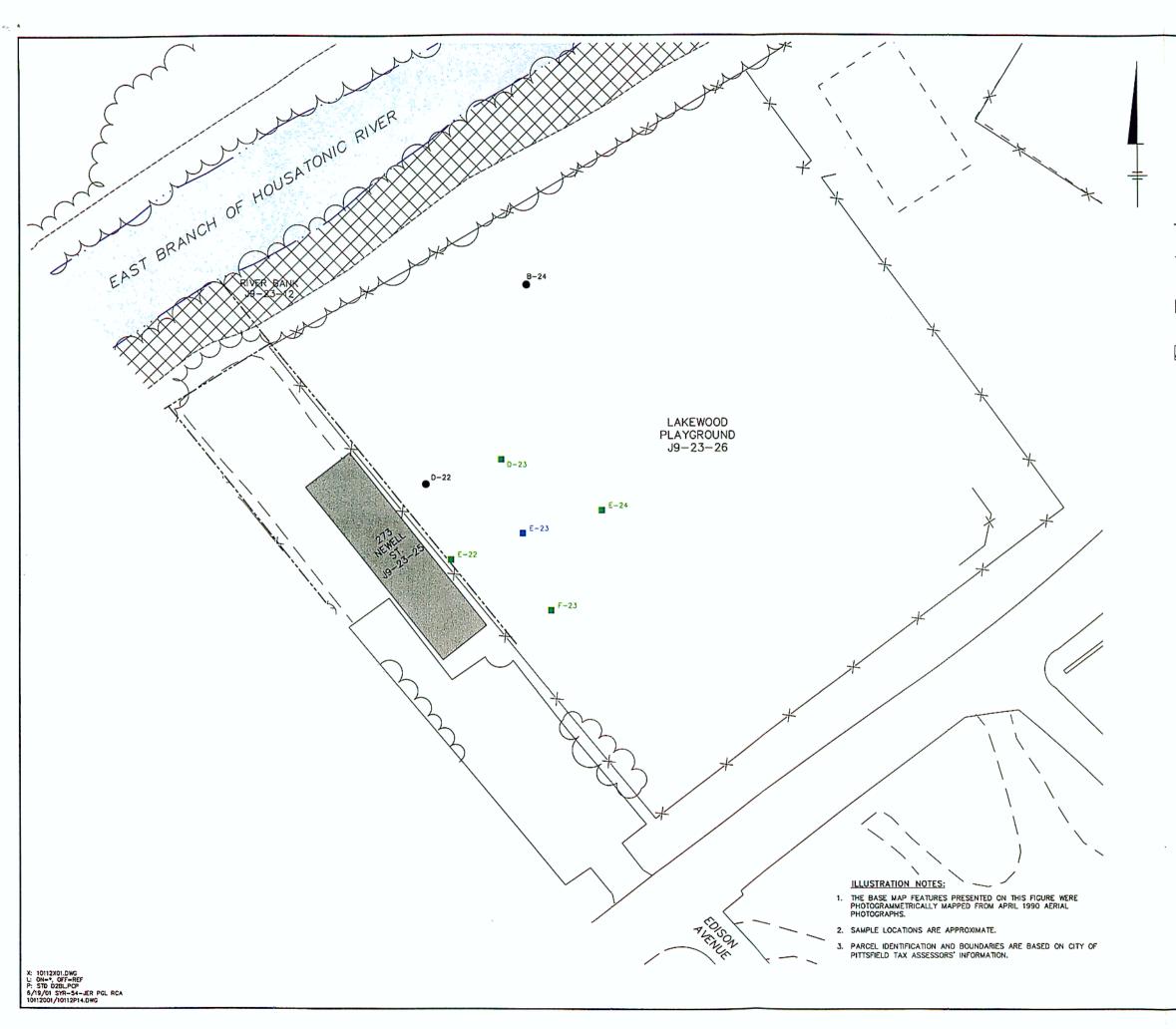
GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS PARCEL J9-23-26

ARSENIC SOIL SAMPLE RESULTS AND PROPOSED SUPPLEMENTAL **INVESTIGATIONS:** 

1- TO 3-FOOT DEPTH INTERVAL

FIGURE

BLASLAND, BOUCK & LEE, INC. engineers & scientists



--- APPROXIMATE PARCEL BOUNDARY

J9-23-23 PARCEL ID

----x-----x----- FENCE LINE

▲ C-25 EXISTING SURFACE SOIL SAMPLE LOCATION

● D-24 EXISTING SURFACE/SUBSURFACE SOIL SAMPLE LOCATION

BUILDINGS

PAVED AREAS

AREA TO BE ADDRESSED AS PART OF 1/2-MILE REACH

SOIL SAMPLE LOCATION PROPOSED FOR ARSENIC SAMPLING AND ANALYSIS (3-6 FT.)

SOIL SAMPLE TO BE COLLECTED AND HELD FOR POSSIBLE ARSENIC ANALYSIS (3-6 FT.)

SUMMARY OF EXISTING SOIL ARSENIC DATA FOR THE 3-6 FT. DEPTH INTERVAL

SAMPLE ID	SAMPLE DEPTH (FEET)	DATE	ARSENIC CONCENTRATION (ppm)
J9-23-26-B-24	3-6	02/08/01	11.0
J9-23-26-D-22	3-6	02/08/01	7.40

GENERAL ELECTRIC COMPANY PITTSFIELD, MASSACHUSETTS PARCEL J9-23-26

ARSENIC SOIL SAMPLE RESULTS AND PROPOSED SUPPLEMENTAL **INVESTIGATIONS:** 3- TO 6-FOOT DEPTH INTERVAL

BLASLAND, BOUCK & LEE, INC. engineers & scientists

FIGURE